UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,596	10/28/2003	Phillip Jeffrey Bloom	57008.23.1	5364

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EXAMINER
TOPGYAL, GELEK W

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2621	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _26 May 2010_.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
    closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-4,6-10,12,14-24 and 30_ is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) _1-4,6-10,12,14-24 and 30_ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on _28 October 2003_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____.
      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
        application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail. Date _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Remarks

1.   The examiner on record has changed from James Fletcher to Gelek Topgyal in

AU 2621. Upon further consideration and review of the application, a new ground of

rejection is presented on pending claims 1-4, 6-10, 12, 14-24 and 30.

Claim Rejections - 35 USC § 101

2.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

> The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

> Claims that recite nothing but the physical characteristics of a form or energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in Sec. 101.

> ... a signal does not fall within one of four statutory classes of 101.

> ... signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec. 101.

3.   **Claims 6-10 and 12** are rejected under 35 U.S.C. 101 as not falling within one of

the four statutory categories of invention. Supreme Court precedent and recent Federal

Circuit decisions indicate that a statutory "process" under 35 U.S.C. 101 must (1) be tied

to another statutory category (such as a particular apparatus), or (2) transform

underlying subject matter (such as an article or material) to a different state or thing.

While the instant claims recite a series of steps or acts to be performed, the claims

neither transform underlying subject matter nor positively tie to another statutory

category that accomplishes the claimed method steps, and therefore do not qualify as a
statutory process. For example, a method comprising (1) storing digitized audio and
moving picture video data, storing timing data, selecting, abstracting, storing the
abstracted audio feature data, storing an audio feature analyzer, storing a timing
analysis, storing a playback control module, storing cueing data, storing additional
digitized audio data steps, (2) providing and original first audio stream, selecting at least
a portion, storing an input second audio, abstracting, comparing, utilizing and running
steps is of sufficient breadth that it would be reasonably interpreted as a series of steps
completely performed mentally, verbally or without a machine.

4.   **Claims 16-18, 22-24 and 30** are rejected under 35 U.S.C. 101 because the
claimed invention is directed to non-statutory subject matter as follows. Regarding
claims 16-18, 22-24 and 30, in the state of the art, transitory signals are commonplace
as a medium for transmitting computer instruction and thus, in the absence of any
evidence to the contrary and give the broadest reasonable interpretation, the scope of a
"data storage medium" covers a signal per se. Therefore, it is suggested by the
examiner that the applicants amend the claims to additionally recite that the data
storage medium is of a "non-transitory" type.

5.   **Claims 1-4, 14-15 and 19-21** are rejected under 35 U.S.C. 101 because the
claimed invention is directed to non-statutory subject matter as follows. It is noted that
the specification discloses: "main operational software modules 810 to 840 of the Run-
time Computer Program 450 and data 430 and 440 which have been assembled as an
executable PC application program, copied to CD ROM 165, and loaded from CD ROM

165 onto the users PC system 100 (FIG. 1). The **program** 450 when run on system 100

in this embodiment carries out the user-initiated operations of the revoicing system."

(paragraph 0160). As evidenced by the specification it appears that said claimed device

is capable of reading on software/program and as such does not fall into any statutory

class of invention. Computer programs claimed as computer listings per se, i.e., the

descriptions or expressions of the programs, are not physical "things." They are neither

computer components nor statutory processes, as they are not "acts" being performed.

See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claim Rejections - 35 USC § 112

6.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

7.   **Claims 1, 2, 6 and 10** are rejected under 35 U.S.C. 112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention.

8.   Regarding claim 1, line 12 recites the limitation of "timing differences are

substantially removed"; claim 2, line 15 recites the limitation of "timing differences are

substantially removed", claim 6, line 17 recites the limitation of "timing differences are

substantially removed" and claim 10, line 15 recites the limitation of "timing differences

are substantially removed". It is not clear whether the "timing differences" are wholly,

partly or slightly removed. However, it is interpreted by the examiner that the "timing

differences" are wholly removed.

35 USC § 112, sixth paragraph

MPEP 2181 discloses that a claim limitation will be presumed to invoke 35 U.S.C. 112, sixth paragraph if it meets the following 3-prong analysis: (A) the claim limitations must use the phrase "means for" or "step for;" (B) the "means for" or "step for" must be modified by functional language; (C) the phrase "means for" or "step for" must not be modified by sufficient structure, material, or acts for achieving the specific function.

9.   With regards to **claims 14-15 and 19-21**, it is noted that said claims have invoked 35 U.S.C. 112, sixth paragraph and meet the 3-prong analysis. Regarding said claims, it is noted that said "means for deriving from audio" limitation is considered to read on the "Feature Analysis (block 1130)" in Fig. 11 and paragraph 0112 teaches of a computer 105a/b (Fig. 4) which implements the corresponding steps. Furthermore, Fig. 1 teaches of a CPU 112 that controls/processes the steps implemented by the computer 105a/b; "means for selecting and measuring" limitations are considered to read on "Feature Analysis (block 1130)" in Fig. 11 and paragraph 0112 teaches of a computer 105a/b (Fig. 4) which implements the corresponding steps. Furthermore, Fig. 1 teaches of a CPU 112 that controls/processes the steps implemented by the computer 105a/b; "means for populating a database" limitations are considered to read on "Database Management 828" in Fig. 8 and paragraph 0167. Furthermore, Fig. 1 teaches of a CPU 112 that controls/processes the steps implemented by the computer 105a/b. Therefore, since the steps are performed by the CPU 112, the corresponding structure exists in the specification. The CPU 112 is a statutory structure that performs the claimed "means for" limitations.

Claim Rejections - 35 USC § 102

10.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. **Claims 14, 17, 19 and 22** are rejected under 35 U.S.C. 102(e) as being anticipated by Nakamura (US 7,424,204).

12. **Regarding claims 14 and 19**, Nakamura teaches an apparatus for processing audio data, comprising:

means for deriving from audio data feature data representative of audible time-varying acoustic features of the audio data (col. 18, lines 1-6 teaches that "audio feature amount extraction unit 102 *calculates an average sound pressure level* (power) per *unit time* on the basis of the inputted audio information or *calculates a sound pressure level for each frequency*". The calculated data (SPL) (meeting "feature data representative of audible time-varying features") is representative of the audio data over "unit time" or over "frequency", which varies over time);

means for selecting a portion of a stream of streamable moving picture video and audio data (col. 17, lines 60+ teaches of "audio feature amount extraction unit 102 decodes the inputted audio information", therefore at least a portion is selected. Furthermore, col. 17, lines 10-15 teaches of a demultiplexer 101 that demultiplexes the "audio information … from the obtained audio/video information"), said audio data being synchronized with corresponding visual events in said video data (col. 17, lines 10-15 teaches of a demultiplexer 101 that demultiplexes the "audio information … from the

obtained audio/video information"),), and measuring position and time-varying acoustic

features of a selected duration of said audio data in said selected portion (col. 20, lines

27-32 recites "the audio feature extraction unit 102, ... , detects a time-base start

position .. and a time-base end position", which meets the claimed measuring (by

detection) position information. Furthermore, the time-varying acoustic features is met in

col. 20, lines 27-32, wherein "each of the silent and noise sections" in the "audio/video

information on the basis of a preset threshold of a silent level … and a threshold of a

noise level". The "silent sections" and "noise sections" are time-varying since these

silent and noise sections occur over a period from a start position to an end position);

and

      means for populating a database (Fig. 1, storage unit 104) with said data (col. 17,

lines 18-19 teaches of "a storage unit 104 for storing audio/video information") and

measurements (col. 20, lines 36-42, wherein "time information on the start and end

position detected for each of the silent and noise sections is output to the storage unit

104") provided by said selecting and measuring means.

      Computer readable medium claim 17 is rejected for the same reasons as

discussed in apparatus claim 14 above.

      Computer readable medium claim 22 is rejected for the same reasons as

discussed in apparatus claim 14 above, and furthermore, the limitation to "measure

timing of intervals containing audible time-varying features of audio data" is given the

same treated as "measuring position and audible-time varying features of a selected

duration of said audio data" because Nakamura recitation of "start Position" and "end

position" in presents an interval.

Claim Rejections - 35 USC § 103

13.　　The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

14.　　**Claims 15, 18, 20-21 and 23-24** are rejected under 35 U.S.C. 103(a) as being

unpatentable over Nakamura (US 7,424,204) in view of Coden et al. (US 6,816,858).

　　　　Regarding claim 15, Nakamura teaches the ability to populate a database with

the audio/video information and the measurement information, however, fails to

particularly teach further comprising means for populating said database with text

related to said data and measurements provide by said selecting and measuring

means.

　　　　In an analogous art, Coden teaches in populating a similar database with text

data related to the audio/video information and measurements. Coden initially teaches

creating text data relative to the scene data (Col 6, lines 26-28 teaches "a speech

recognition module 12A transcribes the audio signal into English and a CCText module

12B extracts closed caption text" and Col 6, lines 38-41 teaches "the speech recognition

module 12A, which may be referred to simply as the speech module, takes an audio

signal or file as input and produces a speech transcript [ASCII TEXT]"). Thereafter,

Coden teaches populating a database with the text data (Col 7, lines 25-30, "The

feature extractor 12 produces ASCII text, both in the form of transcribed text, from speech module 12A, and closed caption text (CCText) from module 12B" and that "the text is time stamped and may be stored in conjunction with the source video signal").

Therefore, in the present combination, Coden would allow Nakamura to generate or extract "ASCII" text or CCText and store it in the "storage unit 104" (where the source video signal ("audio/video information" in Nakamura) is stored). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the ability to storing ACSII or CCText data related to audio/video data as taught by Coden into the system of Nakamura, for providing the benefit of adding relevant collateral information to live programming (abstract).

Claims 18, 20 and 23 are rejected for the same reasons as claim 15 above.

Regarding claim 21, Nakamura teaches the ability to populate a database with the audio/video information and the measurement information, however, fails to particularly teach further comprising means for populating said database with still image data representative of static video data extractable from said scene data.

In an analogous art, Coden teaches in populating a similar database with still data representative of static video data from said scene data (Col 6, lines 44-46 teaches "the OCR module 12C that takes the video as input and determines any text which may be present" and Col 6, lines 51-55 "The face module 12D takes the video as input and determines the number of faces and possibly the identities of the persons themselves. The outputs of the OCR module 12C and the faces module 12D may also be ASCII TEXT". The still data is met by the outputs of OCR module 12C and the faces module

12D in the form of ASCII TEXT), and populating said database with said still data (Col 7,

line 64 – Col 8, line 4 "The output events from the analyzers 14 are stored, in a

presently preferred embodiment, on a linked list data structure, referred to herein as the

knowledge chain 16…The events themselves can then be stored in a database".

Therefore, in the present combination, Coden would allow Nakamura to generate

or extract "ASCII" text (still data) representing still video data and store it in the "storage

unit 104" (where the source video signal ("audio/video information" in Nakamura) is

stored). It would have been obvious to one of ordinary skill in the art at the time the

invention was made to incorporate the ability to storing ASCII data related to

audio/video data as taught by Coden into the system of Nakamura, for providing the

benefit of adding relevant collateral information to live programming (abstract).

Claim 24 is rejected for the same reasons as discussed claim 21 above.

Allowable Subject Matter

Claims 1-4, 6-10, 12, 16 and 30 would be allowable if rewritten or amended to

overcome the respective rejection(s) under 35 U.S.C. 101 and/or 35 U.S.C. 112 2nd

paragraph set forth in this Office action.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to GELEK TOPGYAL whose telephone number is

(571)272-8891. The examiner can normally be reached on 8:30am -5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Peter-Anthony Pappas can be reached on 571-272-7646. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gelek Topgyal/
Examiner, Art Unit 2621

/Peter-Anthony Pappas/
Supervisory Patent Examiner, Art Unit 2621